

Chapter 4-- District Overview

Ecoregions

- Mid-Atlantic Coastal Plain
- Mid-Atlantic Piedmont

Land Use

Regional context

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The District has an interesting dynamic in terms of the interface between humans and wildlife. It is home to both a bustling metropolis as well as a retreat for wildlife and recreationalists. Today, the District boasts more than 900 acres of city parks and more than 6,700 acres of national parkland.²⁴ While it can be difficult for humans and wildlife to coexist within the borders of one city, the District actually has an unexpectedly wide diversity of wildlife and habitats. This coexistence between humans and wildlife can improve and thrive with comprehensive strategic planning.

This chapter gives context to the District's CWCS by providing an overview of the District's geography and land use. The chapter is divided into three parts: the District's ecoregions, land use, and regional context.

Ecoregions

An ecoregion is defined by the World Wildlife Fund as a large area of land or water that contains a geographically distinct assemblage of natural communities that

- shares a large majority of species and ecological dynamics,
- shares similar environmental conditions, and
- interacts ecologically in ways that are critical for longtime persistence.²⁵

The District is located between two ecoregions: the mid-Atlantic Piedmont and the mid-Atlantic Coastal Plain. Essentially, the ecoregions divide the District in half diagonally along the fall line, with the Coastal Plain covering the southeastern half and the Piedmont covering the northwestern half.

The District shares these ecoregions with the surrounding states of the mid-Atlantic region, including Maryland, Virginia, Pennsylvania, New Jersey and, in the case of the Coastal Plain, Delaware, making the District geographically similar to those states. This has many important implications for conservation planning. Issues important to habitats within the District are also important to the surrounding states. Therefore, coordination with those states should be a central component to developing conservation strategies.

The following section gives an overview of the characteristic geography and natural history of these two ecoregions.

²⁴ DC Office of Planning, Environmental Quality, the Washington, DC Comprehensive Plan. Washington, DC: DC Office of Planning, 2005.

²⁵ <http://www.worldwildlife.org/science/ecoregions.cfm>

Mid-Atlantic Piedmont Ecoregion (Physiographic Area 10)

The mid-Atlantic Piedmont extends into Virginia, Maryland, southeastern Pennsylvania and northern New Jersey. It currently covers approximately 66,491 sq km in total. The region is bordered by mid-Atlantic Coastal Plain to the east and the Appalachian Mountains to the west. Beginning at the fall line at 60m in elevation, the Piedmont extends west to the Blue Ridge and the Ridge and Valley regions of the Appalachian Mountains, reaching elevations of 300-600m. The topography of the Piedmont is higher, rolling and more rugged than the Coastal Plain and its soils are composed of erosion-resistant igneous and metamorphic rock, rather than the sands and clays of the Coastal Plain.²⁶

Mid-Atlantic Coastal Plain Ecoregion (Physiographic Area 44)

The mid-Atlantic Coastal Plain extends into Virginia, Maryland, Delaware, Pennsylvania and New Jersey. It currently covers approximately 56,220 sq km in total. The region is bordered by the Atlantic Ocean to the east and the fall line to the west. From the west, rivers flow down from the Piedmont and mountains, including the Appalachian Mountains, where they slow down and release sediment onto the Coastal Plain. At this point, the low-lying plain reaches an elevation of less than 80m and is characterized by bays and tidal rivers, such as the Chesapeake Bay and Potomac River. The soils are primarily derived from the sediments deposited from the mountains and are slow draining, leading to the development of many types of expansive wetlands.²⁷

²⁶ Partners in Flight. *Bird Conservation Plan for the Mid-Atlantic Piedmont*. College Park: University of Maryland, 2003, pg. 5.

²⁷ Partners in Flight. *Bird Conservation Plan for the Mid-Atlantic Coastal Plain*. Williamsburg: College of William and Mary, 1999, pg. 5.

Land Use

While the District is considered an urban center with a large amount of developed land, there are actually multiple other land uses. The DC Office of Planning implements a Comprehensive Plan that includes a land use element.²⁸ It identifies six areas of land use within the District:

1. Residential neighborhoods
2. Commercial areas
3. Production and technical employment areas
4. Public and institutional areas
5. Metrorail station area development
6. Mixed use²⁹

Regional Context

The District is home to many habitats for species of greatest conservation need. These habitats are part of an ecological system that is larger than the boundaries of the District, giving the District an important regional context. The District belongs to the mid-Atlantic region of the United States, which also includes Maryland, Virginia, Delaware, West Virginia and Pennsylvania.³⁰ When viewed as part of the region, the District occupies a comparatively small area of land. Therefore, it is important to view the District in the context of the larger geographical region to gain a full understanding of the needs of shared species and habitats.

The District is bordered by the states of Maryland and Virginia. Both of these states are home to common priority species and habitats. For example, the Chesapeake Bay is an important habitat that extends across the two states and the District. Furthermore, the District is home to migratory species that spend only part of their lives in the District and spend the other part with its neighbors.

Given the regional context, it is essential to coordinate not only with conservation agencies and organizations within the District, but also with conservation agencies and organizations from around the region. In response, the criteria used to determine species of greatest conservation need accounted for the concerns of the District's neighboring states, Maryland and Virginia, as well as regional conservation plans such as the Partners in Flight (PIF) conservation plans.

²⁸

http://planning.dc.gov/planning/frames.asp?doc=/planning/LIB/planning/documents/docs/Chapter_11_Land_Use.PDF

²⁹

http://planning.dc.gov/planning/frames.asp?doc=/planning/lib/planning/documents/Comp_Plan_Progress_Re52879.pdf

³⁰ <http://www.epa.gov/region03/index.htm>